UDC 371.4; IRSTI 14.25.05

https://doi.org/10.47526/2025-2/2664-0686.213

## G. NYIAZOVA<sup>®1</sup>, D. BERDI<sup>®2™</sup>

<sup>1</sup>Candidate of Pedagogical Sciences, Associate Professor Khoja Akhmet Yassawi International Kazakh-Turkish University (Kazakhstan, Turkistan), e-mail: gulzhan.niyazova@ayu.edu.kz <sup>2</sup>PhD, Acting Associate Professor Khoja Akhmet Yassawi International Kazakh-Turkish University (Kazakhstan, Turkistan), e-mail: dinara.berdi@ayu.edu.kz

## PEDAGOGICAL MODELING OF ADOLESCENTS' DIGITAL HYGIENE SKILLS FOR FORMING AND PREVENTING CYBERBULLYING

**Abstract.** The relevance of the study of the main problems of information processes implementation and interpersonal cybercommunication by adolescents in digital space is due to the constant intensity of digital communication and an increase in forms of interaction with social networks. The relevance of this problem is enormous, since technology has taken a leading place in human life with digital economy development. Cyberbullying is intimidating and bullying using digital technology. According to Global Cyberbullying Research Center, about a third of all teenagers in the world have been intimidated and bullied online. It can be accessed on social media, messaging apps, gaming platforms, and mobile phones. Because of the Internet's negative impact, in addition to physical influences, adolescents can lead to problems with emotional and mental health, and a decrease in academic performance. The article presents the features of projects on the prevention of cyberbullying: TABBY, KiVa, Cybereduca 2.0., MediaHelden, Stop Cyberbullying Day, CREEP are shown. Methodological foundations for studying digital hygiene skills formation and cyberbullying prevention of adolescents are focused on an axiological approach, a participatory approach, and a cyberontological approach. Structural and content scheme for the formation of adolescent digital hygiene skills and cyberbullying prevention consists of interrelated and interdependent parts: it is presented through targeted, content-process, effective components, and psychological and pedagogical conditions are defined. In this pedagogical model presented in the study, interrelated and interdependent components are presented, effective psychological and pedagogical conditions are determined.

**Keywords:** digital space, digital hygiene, cyberbullying, adolescence, pedagogical modeling, structural and content scheme.

Nyiazova G., Berdi D. Pedagogical Modeling of Adolescents' Digital Hygiene Skills for Forming and Preventing Cyberbullying // Iasaui universitetinin habarshysy. – 2025. – N2 (136). – B. 315–325. https://doi.org/10.47526/2025-2/2664-0686.213

<sup>\*</sup> Бізге дұрыс сілтеме жасаңыз:

Nyiazova G., Berdi D. Pedagogical Modeling of Adolescents' Digital Hygiene Skills for Forming and Preventing Cyberbullying // Ясауи университетінің хабаршысы. — 2025. — №2 (136). — Б. 315—325. <a href="https://doi.org/10.47526/2025-2/2664-0686.213">https://doi.org/10.47526/2025-2/2664-0686.213</a>

<sup>\*</sup>Cite us correctly:

### Г. Ниязова<sup>1</sup>, Д. Берді<sup>2</sup>

<sup>1</sup>педагогика ғылымдарының кандидаты, доцент Қожа Ахмет Ясауи ат. Халықаралық қазақ-түрік университеті (Қазақстан, Түркістан қ.), e-mail: gulzhan.niyazova@ayu.edu.kz <sup>2</sup>PhD, Қожа Ахмет Ясауи ат. Халықаралық қазақ-түрік университетінің доценті м.а. (Қазақстан, Түркістан қ.), e-mail: dinara.berdi@ayu.edu.kz

# Жасөспірімдердің цифрлық гигиена дағдыларын қалыптастыруды және кибербуллингтің алдын алуды педагогикалық модельдеу

Андатпа. Жасөспірімдердің цифрлық кеңістікте ақпараттық үдерістер мен тұлғааралық киберкоммуникацияны іске асырудың негізгі проблемаларын зерттеудің өзектілігі цифрлық коммуникацияның үздіксіз қарқындылығына, әлеуметтік медиа желілермен өзара әрекеттесу формаларының артуына байланысты. Бұл мәселенің өзектілігі өте үлкен, өйткені технология адам өмірінде цифрлық экономика дамуымен озық орынға ие болды. Кибербуллинг – бұл цифрлық технологияны қолдану арқылы қорқыту және жәбірлеу. Ғаламдық кибербуллингті зерттеу орталығының мәліметі бойынша, әлемдегі барлық жасөспірімдердің шамамен үштен бірі интернетте қорқыту мен қорлауға ұшыраған. Ол әлеуметтік желілерде, хабар алмасу қосымшаларында, ойын платформаларында және ұялы телефондарда болуы мүмкін. Интернет желісінің кері ықпалы нәтижесінде физикалық әсерлерден басқа жасөспірімдер эмоционалды және психикалық денсаулық проблемаларына, оқу үлгерім төмендеуіне әкелуі мүмкін. Мақалада кибербуллингтің алдын алу бойынша танымал TABBY, KiVa, Cybereduca 2.0., MediaHelden, Stop Cyberbullying Day, CREEP жобаларының ерекшеліктері көрсетілген. Жасөспірімдердің цифрлық гигиена дағдыларын қалыптастыру мен кибербуллингтің алдын алуды педагогикалық модельдеу мәселесі қарастырылған. Жасөспірімдердің цифрлық гигиена дағдыларын қалыптастыру және кибербуллингтің алдын алуды зерттеудің эдіснамалық негіздері аксиологиялық тәсіл, партисипативті тәсіл, киберонтологиялық тәсілге бағдарланған. Жасөспірімдердің цифрлық гигиена дағдыларын қалыптастыру және кибербуллингтің алдын алудың құрылымдық-мазмұндық сызбасы сип өзара байланысқан және өзара тәуелді бөліктерден тұрады: мақсаттық, мазмұндық-үдерістік, нәтижелік құраушылар арқылы ұсынылып, психологиялық-педагогикалық шарттары анықталған. Бұл зерттеуде ұсынған педагогикалық модельде өзара байланысты және өзара тәуелді компоненттер ұсынылған, тиімді психологиялық-педагогикалық жағдайлар анықталған.

**Кілт сөздер:** цифрлық кеңістік, цифрлық гигиена, кибербуллинг, жасөспірім, педагогикалық модельдеу, құрылымдық-мазмұндық сызба.

### Г. Ниязова<sup>1</sup>, Д. Берди<sup>2</sup>

<sup>1</sup>кандидат педагогических наук, доцент
Международный казахско-турецкий университет им. Ходжи Ахмеда Ясави
(Казахстан, г. Туркестан), e-mail: gulzhan.niyazova@ayu.edu.kz

<sup>2</sup>PhD, и.о. доцента Международного казахско-турецкого университета им. Ходжи Ахмеда Ясави
(Казахстан, г. Туркестан), e-mail: dinara.berdi@ayu.edu.kz

# Педагогическое моделирование формирования навыков цифровой гигиены подростков и профилактики кибербуллинга

**Аннотация.** Актуальность исследования основных проблем реализации подростками информационных процессов и межличностной киберкоммуникации в цифровом пространстве обусловлена постоянной интенсивностью цифровой коммуникации, увеличением форм взаимодействия с социальными сетями. Актуальность данной проблемы

огромна, так как технологии заняли опережающее место в жизни человека с развитием цифровой экономики. Кибербуллинг — это интернет травля с использованием цифровых технологий. По данным глобального исследовательского центра кибербуллинга, около трети всех подростков в мире подвергались травле и запугиванию в интернете. Он может быть доступен в социальных сетях, приложениях для обмена сообщениями, игровых платформах и мобильных телефонах. В результате, негативное влияние сети Интернет помимо физических воздействий, может привести к снижению успеваемости, к проблемам, связанным с эмоциональным и психическим здоровьем подростков. В статье представлены особенности проектов по профилактике кибербуллинга: TABBY, KiVa, Cybereduca 2.0. Показаны MediaHelden, StopCyberbullyingDay, CREEP.

Для формирования у подростков навыков цифровой гигиены и профилактики кибербуллинга использовался метод педагогического моделирования. Методологические основы изучения формирования навыков цифровой гигиены и профилактики киберзапугивания подростков ориентированы на аксиологический, партисипативный и киберонтологический подходы. Структурно-содержательная схема формирования навыков цифровой гигиены подростков и профилактики кибербуллинга состоит из взаимосвязанных и взаимозависимых частей: представлена через целевую, содержательно-процессную, результативную составляющие, определены психолого-педагогические условия. В данной педагогической модели, представленной в исследовании, представлены взаимосвязанные и взаимозависимые компоненты, определены эффективные психолого-педагогические условия.

**Ключевые слова:** цифровое пространство, цифровая гигиена, кибербуллинг, подростковый возраст, педагогическое моделирование, структурно-содержательная схема.

#### Introduction

Kazakh people systematized and formed unwritten rules and requirements for educating the Kazakh people systematized and formed unwritten rules and requirements for educating the younger generation, which are suitable for socio-public conditions of their time, culture and history, language and mentality, and living environment. Our people have learned that with each age period, a child's mind grows and horizons of knowledge expand [1]. The core of a teenager's thinking is broader, and the content of thinking is richer and more complex. This allows individuals to consciously build their worldview, values of the individual system, and "I – Concept". "Adolescent age is associated with a change in social situation of development – desire to join adult world, orientation of behavior towards norms and values of this world. As a teenager grows up, he moves to an important stage, when, based on general qualitative new character of a person, the structure and composition of a child's actions, basis of conscious behavior, general orientation in the formation of moral representations and social attitudes is created" [2]. The social environment is also the closest social environment that directly contributes to the development of the child's psyche: parents and other family members, later kindergarten teachers and schoolteachers (sometimes family friends or a clergyman). It should be noted that with age, social environment also expands [3]: from the very beginning of preschool childhood, the development of the child is facilitated, and in adolescence and high school youth, some social groups-mass information centers, rallies, sermons in religious communities, etc., may have great influence.

In this regard, today the closest social environment, which directly contributes to the development of adolescents, is expanding its field through social networks. Social networking allows teenagers to create and maintain various social connections, join new groups and communities with common interests and values, discuss topics of interest to them, and find support from other users. Although social networks are effective as an optimal environment for the

implementation of communication services, social network addiction among adolescents is leading to the spread of the cyberbullying problem.

The purpose of the study is to create a structural and meaningful scheme for the formation of skills in digital hygiene and prevention of cyberbullying among adolescents and to determine psychological and pedagogical conditions. Research objectives: - study of domestic and foreign experience in the formation of skills of digital hygiene of adolescents and prevention of cyberbullying, development by pedagogical modeling of a structural and content scheme for the formation of skills of digital hygiene of adolescents and prevention of cyberbullying using axiological, participatory, cyberontological methodological approaches, determination of components of a structural and content scheme and psychological and pedagogical conditions for its implementation.

#### Research methods and materials

Research methods analysis of theoretical sources, systematization of materials and pedagogical modeling. The results of far and near foreign experiments on the formation of digital hygiene skills and cyberbullying prevention in adolescents, monographic studies, and scientific articles of the authors were used as research materials on digital hygiene skills formation and prevention of cyberbullying.

Pedagogical modeling is effective in the formation of a methodology for educational and upbringing work implementation carried out in schools in the direction of digital hygiene skills of adolescents and cyberbullying prevention.

The essence of pedagogical modeling lies in the fact that scientific and pedagogical activity, realizing scientific knowledge ideas, has a system of expression in a new ideal or materialized knowledge and in a refined phenomenon/process, solving problems of scientific knowledge, revealing a certain set of ideas [4].

A structural and content scheme for digital hygiene skills in adolescents formation of and cyberbullying prevention has been developed, and psychological and pedagogical conditions have been determined. Digital hygiene skills in adolescents' formation and structural and content scheme development for cyberbullying prevention were based on axiological approach, participative approach, and cyberontological approach. The axiological approach is based on understanding the social nature of values in digital society conditions, the formation of individual value orientations, their spiritual, moral, and creative principles.

Digital hygiene skills in adolescents' formation and participative approach use in cyberbullying prevention will allow expanding understanding of adolescents about human nature, forming their readiness for partnerships with outsiders, and self-determination in life values system. The cyberontological concept is determined by the conditions for substantiating the potential of constructive use of ICT, computer, internet, and digital technologies for socialization, training and education, based on socio-cultural, psycho-age, gender, ethno-confessional, personal, and individual characteristics of a person. According to V.A. Pleshakov, cyberontology is "human life and/or vital activity in cyberbullying, determined by development level" [5].

#### **Results**

Structural and content scheme for digital hygiene skills in adolescents' formation and cyberbullying prevention consists of interconnected and interdependent parts: target, content-process, and result components.

Target part was defined as the formation of digital hygiene skills in adolescents and theoretical knowledge formation about cyberbullying prevention, readiness to apply this knowledge, values, and norms of behavior formation.

To identify the content and process components of this structural and content scheme, foreign and native scientific practices of forming digital hygiene skills and preventing cyberbullying in adolescents were studied.

Digital hygiene is a fundamental concept that includes skills of information processes, safe implementation over the internet [6]. In cyberbullying prevention at the present stage, digital hygiene skills formation is of great importance, since it is the main prerequisite for cyberbullying prevention.

Basic Rules of digital hygiene [7]: - create a complex registration password, change it frequently and do not duplicate login and password when registering on various sites; - open and use main e-mail for work, separating mail for interest; - always use two-factor authentication, that is, SMS message codes, additional e-mail; - always update programs and operating systems on devices (computer, mobile phone); - do not click suspicious links and do not download suspicious files; - provide your device with reliable anti-virus protection; - the main thing is to ensure confidentiality, that is, to be careful with personal information about yourself.

Currently, the cyberbullying problem among adolescents in the country and abroad is being intensively studied. Scientists, teachers, psychologists, and sociologists have developed various programs for cyberbullying prevention, online assistance, and counseling work is underway (Table 1).

Table 1 – Cyberbullying prevention projects and programs

№	Websource/	Essence and content of the project (program)
	programname	
1	2	3
1.	https://cyberbullying.org	- The Cyberbullying Research Center is designed to provide up-to-date information about the nature, scope, causes, and consequences of cyberbullying among adolescents. The center also explores other behaviors of adolescents on the internet, including sexting, social media abuse, digital dating abuse, and issues related to digital citizenship, resilience, empathy, school climate, etc. [8].
2.	https://stopcyberbullyi ngday.org	Founded in 2012 and coordinated annually by Cybersmile Foundation, Stop Cyberbullying Day is a global awareness and events day, both online and offline. Stop Cyberbullying Day brings together Internet users, Players, brands, scientists, educators, media, nonprofits, governments, and public figures around the world. The annual event provides a great platform to demonstrate or reaffirm your commitment to a friendly and inclusive internet. Social media users are encouraged to post #STOPCYBERBULLYINGDAY on all social platforms to support the event.
3.	https://endcyberbullyi ng.net	The foundation of Cybersmile Foundation is based and coordinated. Cybersmile Foundation - an international non-profit organization, registered as a non-profit organization in the USA and registered as a charitable organization in Great Britain (No. 1147576). Students and parents are focused on reporting cyberbullying and working to eliminate it. The goal of the project is to make the website A Center for the exchange of information accessible to students and parents. It also publishes an "eliminate cyberbullying" bulletin for members every two months, which includes news and information in detail. To publish anti-cyberbullying petitions, to provide advocacy programs, etc.

Continuation of Table 1

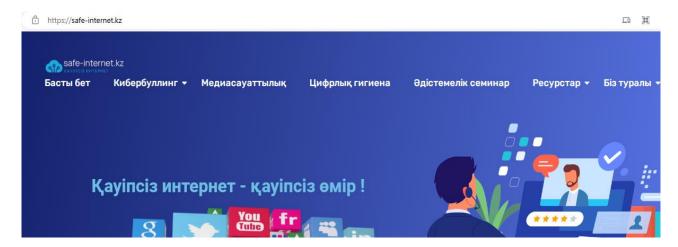
1	2	3
4.	https://www.medienhelden.at/	Media Helden, a program to prevent cyberbullying among teenagers in Germany, as a solution to the problem of increasingly serious teenage cyberbullying. The goal of the Media Holding program is to reduce the number of victims and criminals, as well as to prevent cyberbullying by increasing empathy. Through role-playing games, students practice and train their empathy skills, focusing on their actions and changes as bystanders, and not just on the role of the criminal victim in a cyberbullying situation. Teenage cyberbullying is not an individual problem; but occurs when social power is abused in social relationships. It is hoped that this program will spread the message that cyberspace is also a social space with ethics and rules, and will become a solution to prevent cyberbullying among teenagers [9].
5.	www.cybereduca.com	Created as a program and video game, Cyberprogram 2.0 and Cybereduca 2.0 represent an intervention proposal aimed at combating and reducing cyberbullying in youth, effectiveness of which has been proven in experimental studies. The proposal consists of four key objectives: (1) to reflect on those involved in bullying and cyberbullying situations, (2) to assess the level of damage and severe consequences caused by malicious acts of digital violence, (3) to gain knowledge about the guidelines established to prevent such incidents. what is happening; to know how to react when a person is subjected to digital violence or when he takes note that someone else is hurting, and (4) to promote the development of social and expressive factors that prevent aggressive behavior (for example, empathy, verbal interaction, cooperation, and ethics). The proposal was designed with 25 events in mind, eventually culminating in the Cybereduca 2.0 video game. In the classroom, the activities conclude with the last activity being an online video that completes the intervention program. The video game part of program is organized around an imaginary storyline, which includes a trivial cybernetic study consisting of 120 questions on various topics (for example, cyberphenomena, cybersexuality, computer technology and security, consequences of cyberbullying, coping methods) and answers about cyberbullying [10].
6.	https://www.tabby.eu	Internet Youth Bullying Threat Assessment Program (TABBY) was originally developed in 2010 and implemented in 2011-2013 in Italy and four other EU countries (Bulgaria, Greece, Cyprus and Hungary), and then was conducted in three more EU countries (Spain, France and Poland) with new components. The program was developed based on what scientific community knew about reducing cyberbullying and raising awareness of cyber risks. The program was developed and implemented with the support of the European Union's Daphne Security and Justice Program to reduce violence against women and children, and in some initiator countries (Italy, Spain, France, Hungary) It is still used as one of the existing intervention programs. The TABBY program is based on two components. The first component is a TABBY "toolkit" and includes the following elements: (a) an online self-report questionnaire and a TABBY checklist, which is also used to obtain a "cyberbullying risk" profile; (b) four short videos (available online and on DVD); and (c) a brochure-manual for teachers (digital and paper versions), with which teachers are trained. In order to make the program usable, applicable and useful, paragraphs (a), (b) and (c) are used as materials for the second component of the program to train teachers, who then work with this material with students. The program also provides (d) teacher training in cyberbullying and (e) work with students [11].

Continuation of Table 1

1	2	3
7.	StopBullying.gov	- Provides information from various government agencies (Department of Education (ED), Department of Health and Human Services (HHS), Centers for Disease Control and Prevention (CDC), Health Resources and Services Administration (HRSA), Office of Substance Abuse and Mental Health Services (SAMHSA), Department of Justice (DOJ), Federal Partners for the Prevention of Bullying). The project works closely with the Steering Committee of Federal Partners for the Prevention of Bullying - An interagency organization jointly headed by the Ministry of Education and the Ministry of Health and Human Services, which coordinates policy, research and communications on bullying issues. The site provides unified access to U.S. government information on bullying topics.
8.	https://www.kivaprogram.net	KiVa (abbreviation from KlusaamistaVastaan —"against bullying") is a scientifically based anti-bullying program developed at the University of Turku, Finland, with financial support from the Ministry of Education and Culture of Finland. This is a four-month prevention program (school policy) consisting of educational sessions, trainings, movie screenings, gamification, parent education and mentoring. The program consists of two main components: universal actions and specified actions. Universal actions include classroom lessons that: 1) increase awareness of the role the group plays in supporting bullying, 2) help increase empathy for victims, 3) help promote youth victim support strategies and therefore develop their self-efficacy. The KIVA program is comprehensive, requires the efforts of the entire school, all subjects of education and includes separate curricula for elementary, middle and high school students. The high effectiveness of KiVa has been scientifically proven during a large national randomized and controlled trial, as well as several different studies. KiVa is used all over the world, and it is the most studied anti-bullying program in the world [12].
9.	A video program based on the theory of reasonable action (TRA)	The program includes several preventive videos consisting of the following blocks:1) four short videos (10 minutes), which summarized information about teenagers who were subjected to cyberbullying and eventually committed suicide (this video is used to increase empathy among viewers towards victims of bullying, change their attitude to cyberbullying); 2) information slides with voice acting are used to attract attention including important information about cyberbullying (e.g., definition of cyberbullying, various types of cyberbullying, tactics, used for cyberbullying, the consequences associated with bullying, and prevalence of cyberbullying; in order to inform viewers about cyberbullying); 3) six short memorable realistic plots that consist of narration and description of common cyberbullying events (for example, receiving typical text messages; purpose: formation of empathy towards the victim of bullying, formation of behavior tactics in case of cyberbullying). Sixplotsarebasedonrealeventsofcyberbullying [13].
10.	TheWebQuestprogram	The content of the WebQuest course is presented on a Web page and consists of six blocks: introduction, tasks, process, resources, assessments and conclusions. The entire program consists of eight classes. In classroom, students work in groups, solve various problem situations and learning tasks [14].

Currently, there are not enough domestic online resources providing statistical, informative information about cyberbullying. Information sites and research articles are limited to providing limited data on the problem of cyberbullying.

In order to help eliminate this gap, we have developed a special website for the prevention of cyberbullying, the formation of digital hygiene skills for adolescents, and the improvement of media literacy (https://safe-internet.kz) (Picture 1).



Picture 1 - The main page of the site

"Creep Virtual Coach" is a mobile application designed to provide digital support to teenagers to combat, report, and prevent cyberbullying. The Creep virtual trainer offers teenagers recommendations and psychological and educational materials (in the format of a short videocartoon) to strengthen their vitality and ability to overcome difficulties. Surveys to collect information about experienced or certified cyberbullying activities [16].

Large-scale measures are being implemented in the country to prevent online cyberbullying. In particular, TikTok, together with UNICEF and with the support of the Committee for the Protection of Children's Rights of the Ministry of Education of the Republic of Kazakhstan, continues the large-scale campaign "Academy of Security", launched last year and aimed at improving the digital literacy of users in Kazakhstan. The second phase of the campaign focuses on the problem of bullying in the online space, TikTok, and the UNICEF anti-cyberbullying project "#Positivsaila". The project is supported by the Committee for the protection of children's rights of the Ministry of Education of the Republic of Kazakhstan and contributes to the creation of a friendly atmosphere on the internet, which, according to users of the platform, protects against psychological influence, aggressive comments and other manifestations of online bullying (https://www.unicef.org).

#### **Discussion**

Cyberbullying prevention among adolescents requires systematic implementation of methodological work in combination with the scientifically based "Unified educational program" adopted in the country [17], which is carried out systematically. This program proposes to focus content, format of educational measures and projects with adolescents in the content of adolescent education at the age of 11-15 years on the psychological characteristics and interests of children, take into account the achievements of digital technologies and involve the family in social partnership for projects implementation; organize "holidays without gadgets" days.

Because of the analysis of the results presented in Table 1 above, the content-process component of digital hygiene skills in adolescent formation and cyberbullying prevention was identified. This part determines the stable, consistent, purposeful nature of digital hygiene skills and preventing cyberbullying in the adolescents forming process.

Substantive and procedural component of drawing includes substantive and procedural parts. Content part is in the content structure of age pedagogy and determines the content of forming holistic knowledge of adolescents about the digital hygiene process, cyberbullying and strategies for solving its problems. The process part includes effective didactic tools used: digital hygiene of adolescents, consistency, and expediency in choosing methods for preventing cyberbullying. As methods that ensure the functioning of this part, we chose problem situations, situational problem solutions, multidimensional-holographic method (methods of conceptual and terminological understanding). As a way to implement the process part, forms were selected: lectures, seminars, educational hours, trainings, and development of presentation materials (booklets, animated videos, presentations, etc.).

Resultant component ensures timely receipt by adolescents of information on the effectiveness of forming digital hygiene skills and preventing the cyberbullying process, on difficulties and achievements of adolescents, and on necessary skills development. An effective component performs an analytical function (that is, it helps to establish the level of cyberbullying prevention and digital hygiene skills in adolescents' formation, to address the difficulties that have arisen, and to identify their causes). Methods for implementing this component are assessment, testing, and survey.

The effectiveness of pedagogical modeling and implementation of forming digital hygiene skills and preventing cyberbullying in adolescents is directly related to compliance with a set of psychological and pedagogical conditions, namely:

- 1. Systematic organization of consultations for digital hygiene skills of adolescents.
- 2. Teach teenagers strategies for solving problems of cyberbullying, and implement psychological training aimed at psychological self-regulation skills.
- 3. Providing psychological assistance to adolescents who have become victims of cyberbullying, contributing to the positive self-concept of the individual's formation.
- 4. Digital hygiene skills of adolescents' formation and systematic monitoring of cyberbullying prevention, and accounting for its results in the educational process.

#### **Conclusion**

The structural and content scheme proposed by us for the formation of adolescent digital hygiene skills and the prevention of cyberbullying is represented by interrelated and interdependent components: targeted, substantive, procedural, effective, psychological and pedagogical conditions are defined. In addition, it is focused on achieving a high level of development of digital hygiene skills and prevention of cyberbullying among adolescents. The outlined components of the scheme are implemented on the basis of an integrated scientifically based methodological system aimed at solving research problems. Based on the above, we believe that the results of this study can contribute to improving research in the field of developing adolescent digital hygiene skills and preventing cyberbullying, contributing to a more holistic approach in this context.

This study was funded by the Committee of Science of the Ministry of Science and higher education of the Republic of Kazakhstan (grant  $N_{2}$  AP19679127)

#### **BIBLIOGRAPHY**

- 1. Бапаева М.К. Даму психологиясы: Оқулық. Алматы: ЖШС РПБК Дәуір, 2014. 440 б.
- 2. Урдабаева Л.Е., Рахматулина А.Р. «Даму психологиясы»: Оқу құралы = Developmental psychology: Training manual. Қостанай: А. Байтұрсынов атындағы Қостанай мемлекеттік университеті, 2018. 257 б.
- 3. Жұбаназарова Н.С. Жас ерекшелік психологиясы: оқулық. Алматы: Қазақ университеті, 2014. 249 б.

- 4. Гутак О.Я., Козырев Н.А., Козырева О.А. Педагогическое моделирование как метод и технология продуктивно-инновационного решения задач профессионально-педагогической деятельности // Вестник Северо-Кавказского федерального университета. 2019. №5 (74). С. 154–162.
- 5. Плешаков В.А. Киберсоциализация человека. Ver. 1.0. Монография. Saarbruecken: LAP LAMBERT Academic Publishing, 2012. 556 с.
- 6. Ашманов И.С., Касперская Н.И. Цифровая гигиена. М.: Дело, 2022. 451 с.
- 7. Сейітқазы П.Б. Медиасауаттылық кибербуллингтің алдын алудың шарты ретінде // «Білім беру ұйымдарында буллинг және кибербуллингтің алдын алу: теория және тәжірибе» атты Халықаралық ғылыми семинар жинағы. Астана, 2023. Б. 66–72.
- 8. Hinduja S., Patchin J.W. Bullying and cyberbullying offending among US youth: The influence of six parenting dimensions // Journal of Child and Family Studies. 2022. V 1. 31. №5. P. 1454–1473.
- 9. Chaux E. et al. Effects of the cyberbullying prevention program media heroes (Medienhelden) on traditional bullying //Aggressive behavior. 2016. Vol. 42. №2. P. 157–165.
- 10. Garaigordobil M., Martínez-Valderrey V. Technological resourcesto prevent cyberbullying during adolescence: Thecyberprogram 2.0 program and the cooperative cybereduca 2.0 videogame // Frontiers in psychology. 2018. Vol. 9. doi: 10.3389/fpsyg.2018.00745
- 11. Athanasiades C. et al. Internet use and cyberbullying among adolescent students in Greece: the "Tabby" project // Hellenic Journal of Psychology. 2015. Vol. 12. №1. P. 14–39.
- 12. Resett S., Mesurado B. Bullying and cyberbullying in adolescents: a meta-analysis on the effectiveness of interventions // Psychiatry and Neuroscience Update: From Epistemology to Clinical Psychiatry. 2021. Vol. IV. P. 445–458.
- 13. Doane A.N., Kelley M.L., Pearson M.R. Reducing cyberbullying: A theory of reasoned action-based video prevention program for college students // Aggressive behavior. 2016. Vol. 42. №2. P. 136–146.
- 14. Lee M.S. et al. Cyber bullying prevention: Intervention in Taiwan // Plos one. 2013. Vol. 8. №5. S. e64031.
- 15. Gabrielli S. et al. School interventions for bullying–cyberbullying prevention in adolescents: Insights from the UPRIGHT and CREEP projects // International journal of environmental research and public health. −2021. − Vol. 18. − №21. − P. 11697.
- 16. Nee C.N. et al. The digital defence against cyberbullying: A systematic review of tech-based approaches // Cogent Education. − 2023. − Vol. 10. − №2. https://doi.org/10.1080/2331186X.2023.2288492
- 17. Жоғары оқу орындарынан басқа білім беру ұйымдарына арналған «Біртұтас тәрбие бағдарламасын» бекіту туралы №294 бұйрық. 19 қыркүйек 2023 ж. [Электронды ресурс]. URL: https://www.gov.kz/memleket/entities/edu/documents/details/539827?lang=kk. (қаралған күні 25.01.2024)

#### REFERENCES

- 1. Bapaeva M.K. Damu psihologiasy: Oqulyq [Developmental psychology: textbook]. Almaty: JShS RPBK Dauir, 2014. 440 b. [in Kazakh]
- 2. Urdabaeva L.E., Rahmatulina A.R. «Damu psihologiasy»: Oqu quraly = Developmental psychology: Training manual. Qostanai: A. Baitursynov atyndagy Qostanai memlekettik universiteti, 2018. 257 b. [in Kazakh/in English]
- 3. Jubanazarova N.S. Jas erekshelik psihologiasy: oqulyq. Almaty: Qazaq universiteti, 2014. 249 b. [in Kazakh]
- 4. Gutak O.Ia., Kozyrev N.A., Kozyreva O.A. Pedagogicheskoe modelirovanie kak metod i tehnologia produktivno-innovacionnogo reshenia zadach professionalno-pedagogicheskoi deiatelnosti [Pedagogical modeling as a method and technology of productive and innovative decision of the task of professional and pedagogical activity] // Vestnik Severo-Kavkazskogo federalnogo universiteta. − 2019. − №5 (74). − S. 154–162. [in Russian]
- 5. Pleshakov V.A. Kibersocializacia cheloveka [Cybersocialization of people]. Ver. 1.0. Monografia. Saarbruecken: LAP LAMBERT Academic Publishing, 2012. 556 s. [in Russian]

- 6. Ashmanov I.S., Kasperskaia N.I. Cifrovaia gigiena [Digital hygiene]. M.: Delo, 2022. 451 s. [in Russian]
- 7. Seitqazy P.B. Mediasauattylyq kiberbullingtin aldyn aludyn sharty retinde [Media literacy as a condition for preventing cyberbullying] // «Bilim beru uiymdarynda bulling jane kiberbullingtin aldyn alu: teoria jane tajiribe» atty Halyqaralyq gylymi seminar jinagy. Astana, 2023. B. 66–72. [in Kazakh]
- 8. Hinduja S., Patchin J.W. Bullying and cyberbullying offending among US youth: The influence of six parenting dimensions // Journal of Child and Family Studies. 2022. V l. 31. №5. P. 1454–1473.
- 9. Chaux E. et al. Effects of the cyberbullying prevention program media heroes (Medienhelden) on traditional bullying //Aggressive behavior. −2016. − Vol. 42. − №2. − P. 157–165.
- 10. Garaigordobil M., Martínez-Valderrey V. Technological resourcesto prevent cyberbullying during adolescence: Thecyberprogram 2.0 program and the cooperative cybereduca 2.0 videogame // Frontiers in psychology. 2018. Vol. 9. doi: 10.3389/fpsyg.2018.00745
- 11. Athanasiades C. et al. Internet use and cyberbullying among adolescent students in Greece: the "Tabby" project // Hellenic Journal of Psychology. − 2015. − Vol. 12. − №1. − P. 14–39.
- 12. Resett S., Mesurado B. Bullying and cyberbullying in adolescents: a meta-analysis on the effectiveness of interventions // Psychiatry and Neuroscience Update: From Epistemology to Clinical Psychiatry. 2021. Vol. IV. P. 445–458.
- 13. Doane A.N., Kelley M.L., Pearson M.R. Reducing cyberbullying: A theory of reasoned action-based video prevention program for college students // Aggressive behavior. 2016. Vol. 42. №2. P. 136–146.
- 14. Lee M.S. et al. Cyber bullying prevention: Intervention in Taiwan // Plos one. 2013. Vol. 8. №5. S. e64031.
- 15. Gabrielli S. et al. School interventions for bullying–cyberbullying prevention in adolescents: Insights from the UPRIGHT and CREEP projects // International journal of environmental research and public health. − 2021. − Vol. 18. − №21. − P. 11697.
- 16. Nee C.N. et al. The digital defence against cyberbullying: A systematic review of tech-based approaches // Cogent Education. − 2023. − Vol. 10. − №2. https://doi.org/10.1080/2331186X.2023.2288492
- 17. Jogary ogu orvndarynan basga bilim beru uiymdaryna arnalgan «Birtutas tarbie bagdarlamasyn» bekitu №294 gyrkuiek jyl. [Electronic resource]. URL: turaly buiryq. 19 2023 https://www.gov.kz/memleket/entities/edu/documents/details/539827?lang=kk. (date of access 25.01.2024) [in Kazakh]